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AUTHOR Greenberg, James; And Others
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ABSTRACT

Purposes, strategies, and history of evaluation of the Maryland Teacher Education Center are presented. The original purposes are classified in three categories: Process, Organization, and Outcomes. The evaluation design is discussed as to basic questions and emerging conceptual frameworks. (DB)

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Preliminary Draft of Presentation for AERA Special Interest Group in Teacher Education

Teacher Education Centers: University of Maryland

James Greenberg

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Introduction

In 1968, the University of Maryland received the AACTE Award for the Teacher Education Center concept, one dimension of the professional component of a total program preparing teachers in all areas of elementary and secondary education. Beginning with a limited number of sites in one Maryland county, this effort has grown to encompass fifteen centers in seven counties and municipalities in Maryland and the District of Columbia within six years.

We, who are currently charged with the most direct responsibility for the University of Maryland's part of the Center effort, are new to the scene. Our relation to the operation might be characterized as new leadership, a function with the implicit advantages and limitations that accrue to such a role. Consequently, this submission will attempt to define purposes, strategies, and the history of evaluation of the Center effort as we have come to know it and will present our current thinking about evaluation from this particular perspective.

Description of the Center Effort

What can be said about the Center effort derives from the literature and reports which reside at the University and from the perceptions of those persons who played and continue to play some part in the creation

and maintenance of the Teacher Education Centers. Public School systems and the University have joined together in mutual selection of center schools, center coordinators, and definition of project parameters and rold functions.

Students obtain pre-service experience through cooperation of a variety of Center personnel instead of being assigned to one supervising teacher. This arrangement provides a potential for flexibility and individuality in each student's experience and is specifically manifested in intensive and extensive experiences on multiple levels in Center schools. Clinical supervision is shifted toward the coordinator and school personnel in a form different from traditional school and college supervision. According to the plan, coordinators and college supervisors function as trainers of teacher trainers. Seminars, skill development, and extensive feedback are other components of pre-service strategies in Centers. An array of in-service offerings, professional materials, equipment, and travel replaces the usual monetary stipend for Center supervising teachers. Mutual benefit is expected from these arrangements.

Our brief involvement with The Maryland Teacher Education Center effort begets admiration for the extent of innovative movement involved in the development and growth of the Centers. Institutions are hard to change, and the commitments of this large University and the related public school systems in this venture reflect an achievement that is notable in and of itself.

From the two sponsoring institutional sources and from direct contact and observation, a summary of purposes and evaluation can be cited.

PURPOSES AND STRATEGIES

The original purposes can be classified in three categories.

Process. The center effort is intended to: unify pre- and in-service teacher preparation into continuous study for individuals in training; bridge the gap between University and school systems and provide a means for articulation and mutual involvement; utilize technology and knowledge of learning systems in a more effective professional component; provide a locus for research and knowledge production.

Organization. The organizational structure is intended to establish cooperative units between the University and public school systems, which are jointly funded and operated; to establish the position of a Teacher Education Center coordinator, jointly employed by the two systems, who acts as liaison and administrative leader of his individual center; and to join two or more schools into a center linked through a conceptual base.

Outcomes. It is intended that the outcomes will be: teachers who can demonstrate flexibility, individual teaching styles, and a variety of teaching strategies; practitioners who continually renew and improve their teaching; and proficient clinical trainers.

EVALUATION

To our knowledge, evidence does not exist that a comprehensive evaluation design was built into the original Center effort at the time of its initiation. Rather, energies have been devoted to the important aspects of growth and expansion as well as program development. Over the years, attention has been given to evaluation. School and college personnel have reported investigations and findings. One

form of "evaluation" has been the ongoing sharing and reporting of developments by coordinators and organized planning groups which provides a minimal feedback mechanism for decision makers. Some attention was given to systematic evaluation through the appointment of a research coordinator. (Currently, this position does not exist.) Findings from work done at that time, reported at the 1970 AERA Conference, indicated that "student teachers in Centers do teach differently and hold different attitudes than their non-Center peers."[1]

Evaluation Design: Emerging Frameworks

While new leaders who inherit projects do not have the luxury of designing an evaluation component as an integral part of an original plan, some design possibilities can be anticipated based on the needs as perceived in the current context. Decisions, innovations and modifications continue to be required.

Instead of drawing upon outside evaluators with particular skills, interests, and role definitions, which places its own kind of constraint upon evaluation, emerging evaluation frameworks are derived here directly from the vantage point of current decision-makers. It should be made explicit that certain of the participating decision makers are most recently project inheritors and are outside heirs of the Center effort. Thus, the requirements for gathering information, i.e. knowledge calculated to reduce uncertainty in decision making, in contrast to collecting data unrelated to administrative values and goals,are considerable.

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[1] David B. Young. "Teacher Education Centers: Do They Make a Difference." Paper read at AERA Annual Meeting, Chicago, 1970.

It also seems useful, for our purposes at this time, to distinquish between evaluation and research. Essentially, the former has as its primary focus the determination of either absolute or comparative worth, while the latter is concerned with the production of new knowledge. In this framework then, evaluation may, but does not necessarily, contribute to the advancement of knowledge.[1] Its primary criterion is informational utility for decision-making. Thus, the possible discovery of insignificant relationships between the performance produced by the standard and the innovative program would constitue valuable data, i.e. information, for decision-making with particular reference to relative costs reflecting program commitments. However, such findings would not have knowledge implications beyond the immediate environment. Mindful of the need for systematic inquiry into teaching and its potential utility to practitioners as well as researchers and even desirous of contributing to that process, it nonetheless appears necessary to distinquish between the two related but not synonymous tasks of research and evaluation. As a practical matter, merging the separate function of evaluation with attempts at creating knowledge may result in doing neither task adequately.

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[1] Both the rationale and the second evaluation framework in this paper owe a considerable debt to: Michael Scriven "The Methodology of Evaluation" in Ralph Tyler, et. al. Perspectives of Curriculum Evaluation, AERA monograph Series on Curriculum Evaluation No. 1, Chicago, Rand McNally, 1967, pp. 39-83 and Robert Stake "The Countenance of Educational Evaluation", Teachers College Record, 68 (April, 1967), pp. 523-540.

Basic Questions

The context into which evaluation now fits involves decision makers in several public school systems and at the University of Maryland. To be worthwhile, an evaluation design will have to answer some basic questions for these decision makers and will have to generate studies and information directly related to effective decision making.

Basic questions that need to be answered are as follows:

Was the original Teacher Education Center plan implemented and to what degree?

Does the project affect:

1. measurable gains in specified teacher behaviors?
2. measurable gains in specified pupil outcomes?
3. direct or indirect changes in professional sequence?

Should the project, or any of its constituents or component parts:

1. continue as it is?
2. be replicated?
3. be revised somewhat or extensively?
4. be terminated?

Emerging Conceptual Frameworks

At least two emerging conceptual frameworks seem to reflect our thinking to date about useful evaluation design possibilities. In light of the planning-decision questions to be answered, a design will have to reveal not only where the Teacher Education Center effort is in terms of its original and present conception, but also whether or not its

focus and goals are in keeping with current thinking about teacher education. It is hoped that any evaluation process will forward the development of emergent conceptions of future instructional roles and assist in casting teacher preparation efforts squarely in the context of studies of teaching behavior.

Any post hoc evaluation effort is weakened by all the well known drawbacks for entering a field lacking specific provisions for evaluation concurrent with project development. However, an understanding of the project's past appears to have utility for current decision-making. Conscious of the need for gathering information bearing upon present decisions it also appears logically possible to use current status assessment as baseline measures for any new program versions or variations that may develop.

Several criteria applicable to the frameworks for evaluation designs discussed here need to be specified:

1. They are open ended, i.e. make provision for inclusion of new knowledge, values, individuals. . .
2. They have future focus and feedback potential for a wide range of decision-makers.
3. They are timely in anticipating future issues requiring prompt decisions.
4. They search for both goal achievement and failure.
5. They monitor for unintended consequences.
6. They emphasize controllable components.

Evaluation designs should provide evidence on central questions such as: (1) Are there particularly successful as well as unsuccessful

Centers (2) What components are responsible for relative success or failure? (3) Are there identifiable groups, subpopulations, exhibiting substantial gains or losses?

A first framework possibility would be a comprehensive matrix (see Figure 1) developed for the purpose of generating evaluation questions and studies along several criteria levels. On the vertical axis, stated and implied project goals represent the specific foci for study and evaluation. On the horizontal axis, levels of criteria are designated around which different degrees of design elements can be developed. Turner's six criteria levels[1] are included in descending hierarchical order. A seventh level is added for the purpose of generating historical and status studies for needed background data. This level of investigation should develop documentation information about past and present implementation levels of stated intentions as well as provide subjective attitudinal data from affected parties.

The matrix generates cells, each of which ties a specific purpose with a specific level of evaluation. Two categories of results of this pairing will be possible. First, each purpose will be scrutinized for evaluation potential at each level. Performance criteria require performance-based objectives and so determinations about the quality of each purpose will be forthcoming in these terms. Where purposes do not lend themselves to evaluation in performance terms, background redefinition tasks will be indicated, along with determinations about needed data on objectives, for evaluation to proceed at a fruitful

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[1]Excerpt from Power of Competency Based Teacher Education. Final Report of the Committee on National Program Priorities in Teacher Education (CNPPTE) Benjamin Rosner, Chairman. United States Office of Education, 1971. (See Appendix)

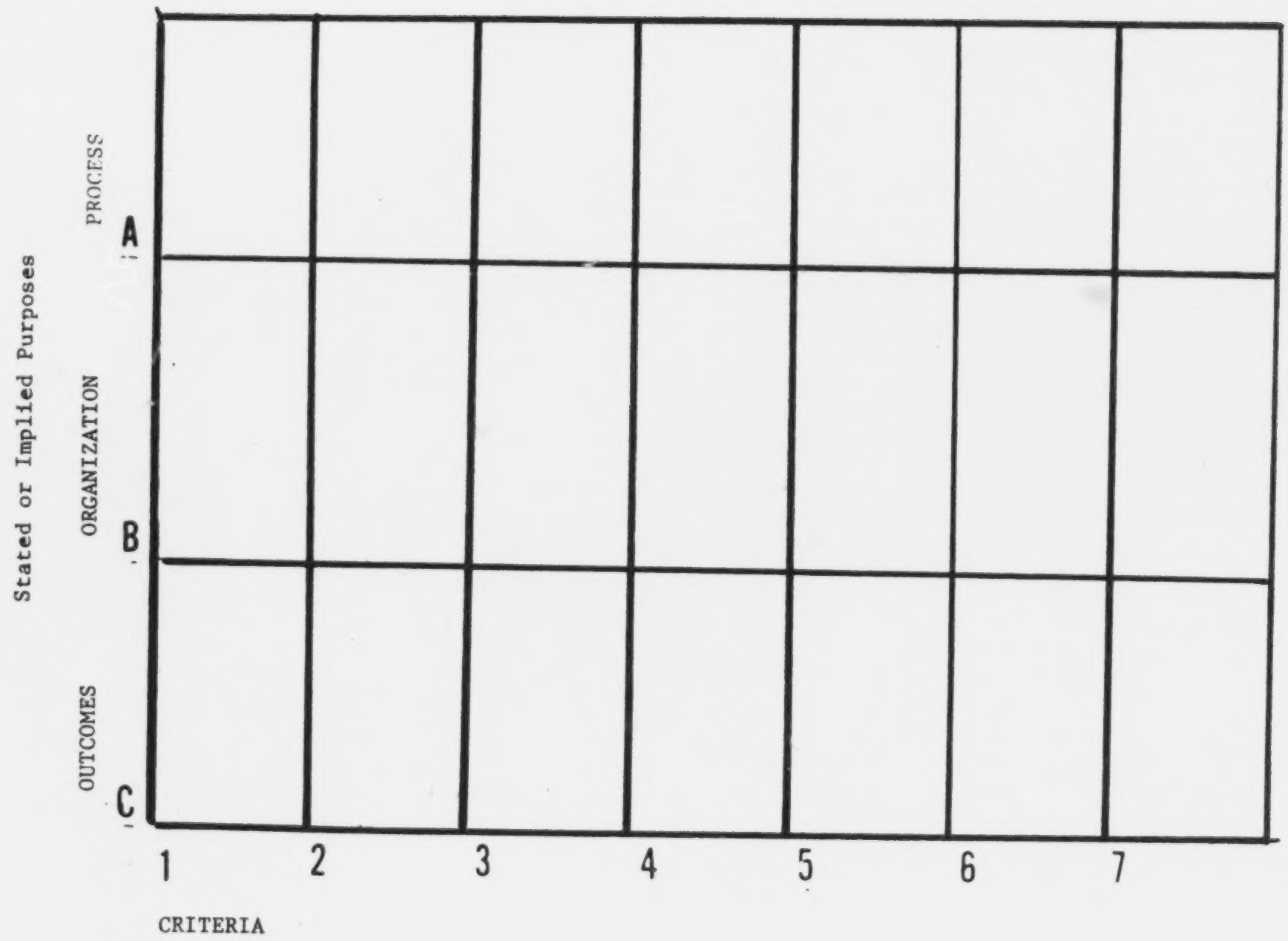

FIGURE 1

Comprehensive Matrix for Generating
Evaluation Questions and Studies

level. Second, questions and studies will emerge in each cell as a basis for individual designs. Following this, steps can be included in each cell outlining appropriate indicators, format and instruments for data gathering, feasibility of data collection on time, cost and personnel dimensions, analytical steps, and procedures for feeding results into planning decision contexts. For instance, an obviously limited example of foci which could be generated in these cells is outlined in Figure 2.

Current systematic evaluation studies are focused on (1) simulation strategies in relation to selected supervisor and student teacher behavior, and (2) analytical studies of supervisory conference behaviors and the effects of self-determined feedback upon classifications of supervisory interaction developed by Heidelbach.[1] These studies might be classified in the Comprehensive Matrix Cells A5 and C4 respectively. (See Figure 1) Center Coordinators are collaborating with college personnel in carrying out these investigations.

A second conceptual framework utilizes implementation or consistency analysis. This offers another possibility for evaluation that meets the previously stated criteria. In the context of joint school-university operation of the Teacher Education Centers, which are the subject of the evaluation, consistency analysis would encompass multiple levels and, at least, dual institutional perspectives.

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[1]Ruth Heidelbach, "The Cooperating Teacher as Teaching Tutor," Inquiry into Teaching Behavior of Supervisors in Teacher Education Laboratories. Margaret Lindsey and Associates, (New York: Teachers College Press, 1969).

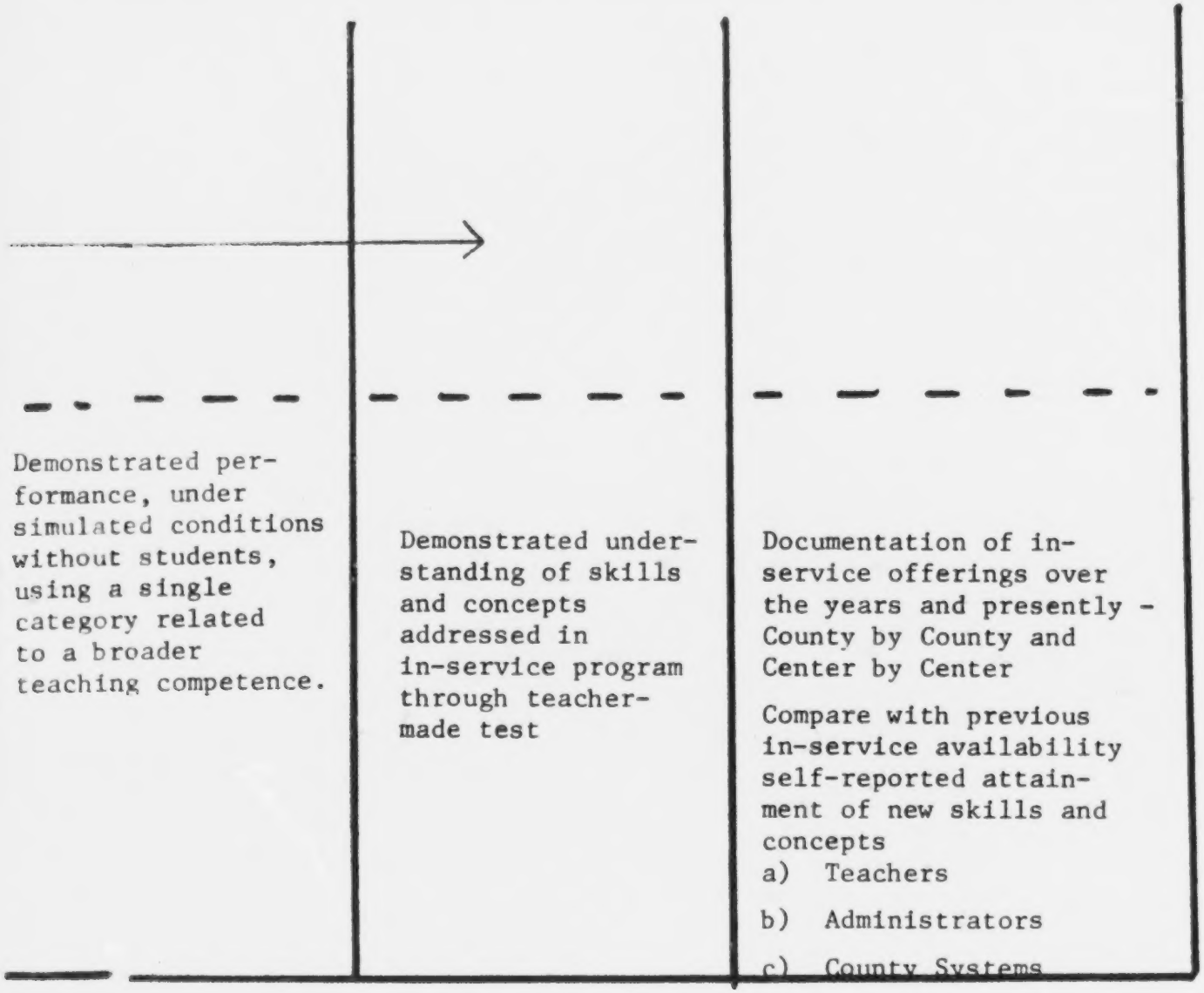
The Strengthening of In-Service Teacher Education Programs

O U T C O M E P U R P O S E

	CRITERIA LEVELS			
Redefinition Task	Extrapolation of objectives for in-service courses, including implications for pupil and teacher behavior			
Design Foci	Comparative assessment of pupil achievement and growth in pertinent areas over two years.	six to twelve months	Comparative assessment of behavior in areas addressed by in - service 1. as teacher 2. as supervisor	Demonstrated performances under simulated conditions with students of specified behaviors

F I G U R E 2

Sample Matrix Cells


Demonstrated performance, under simulated conditions without students, using a single category related to a broader teaching competence.
Demonstrated understanding of skills and concepts addressed in in-service program through teacher-made test
Documentation of in-service offerings over the years and presently - County by County and Center by Center
Compare with previous in-service availability self-reported attainment of new skills and concepts
a) Teachers
b) Administrators
c) County Systems

It would match (1) goals or plan, (2) instructional strategies or program and (3) tested-for or expected performance. Within the performance category it would be important to assess match between tested-for and expected performance by both institutional sponsors.

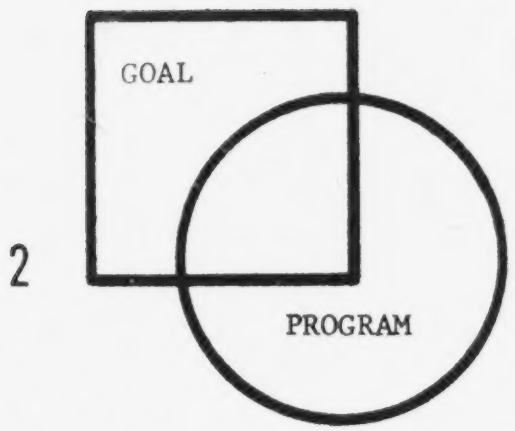
A partial list of appropriate items for the three categories is found below:

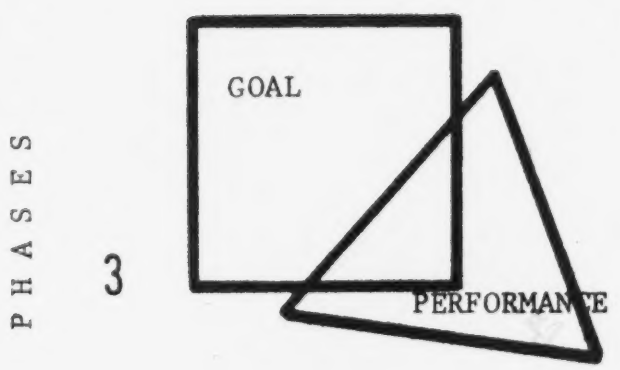
GOAL	PROGRAM	PERFORMANCE
1. Unify Pre- and In-Service preparation	Coordinator assessment of student & staff needs	Continuous professional growth
2. Integrate theory with practice	Relate on and off-campus segments through coordinator	
3. Individualized professional development	Intensive and extensive experiences; in-service offerings	Flexibility, individual style
4. Systematic analysis of classroom behaviors	Professional Seminars, materials, equipment and travel	Variety of teaching strategies
5. Utilize educational technology	Microteaching	Proficient clinical trainers and practicioners
6. Locus for: research and model programs		

FIGURE 3
Consistency Analysis

A four phase investigation conducted by independent workers engaging in parallel inquiry is proposed. The first phase would review logical consistency and/or conflict among goals. This explores congruence and/or divergence within and among (a) explicit, (b) implicit and (c) tested-for goals. The second, third and fourth phases, going in tandem with this necessary goal review are examinations of match between: goals and program; goals and tested-for or expected performance; and program and tested-for or expected performance. A graphic representation of these three match models is found in Figure 4. It should be noted that if there is congruency among goals and program and goals and performance that consistency between program and performance would logically follow. However, phase four is included as an internal empirical check on the previous phases.

For purposes of illustration it may be useful to consider the match among a few items representing past goals, presented in Figure 5. Explicit goals are derived from documentary statements, implicit goals are retrospective assertions about program objectives and tested- for goals are measures regularly employed in monitoring the program components. The analysis would ascertain the logical connection among the three goal dimensions cited. This analysis needs to include dual institutional perspectives and it may also focus on developments over time. While the previous examples are merely intended for purposes of illustration it is clear that the original center plan did not in all cases provide for tested-for goals to accompany its explicit or stated objectives.





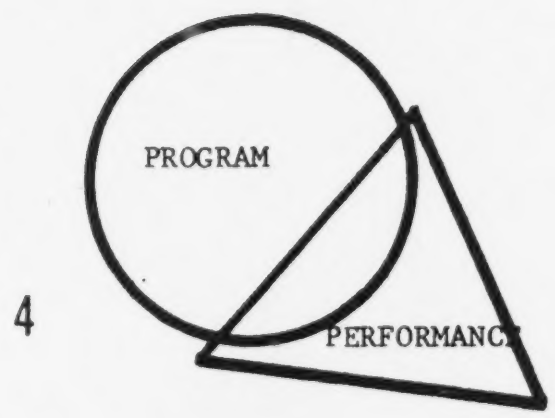


FIGURE 4

Graphic Representation of Match Models

explicit goal	implicit goal	tested-for goal
1. Establish jointly funded and operated centers	bring school and university closer together	in-service enrollment
2. create coordinator- liason	reduce college faculty supervising load	pre-service participation of school personnel
3. provide variety of student placements	wider exposure to practices	?

Figure 5
Consistency Analysis of Goals

The outcome of following such an evaluation design is data-grounded decision-making. If goals are still deemed worthy; and if there is match among goals, program and performance; and if influence of new knowledge, values and individuals is also consistent with the afore-mentioned process then adequate information has been provided for (a) continuance and (b) replication. However if match is lacking and there are no intervening influences, then information has been provided for any one or combination of actions such as: (a) revise goal (b) revise program components to fit goal, (c) start anew, or (d) ignore discrepancy.

Prior to the adoption of any one or combining conceptual frameworks there needs to be review of the projected effort. It is also hoped that the SIG Teacher Education session will provide a significant opportunity for feedback and interchange and for rendering different evaluation studies and designs useful to workers in other contexts. A means for establishing comparability of evaluation designs and findings would appear essential so that studies on limited localized populations and programs may be pooled and thereby gain greater generalizability for decisionmaking, program development and practice.